

Thorax above shining blue-black, clothed with short black hair, a line over the wings connecting with pleura and the pleura themselves covered with long, dense, matted, yellowish white pubescence, not varied with black spots. A dense black fringe around border of scutellum. Wings brownish hyaline. Legs black, shining, clothed with short black pubescence, not pollinose. Abdomen shining steel-blue, clothed with minute black hairs, not pollinose or pale pubescent except on penultimate segment which is, excepting the apical margin, uniformly white pollinose and clothed with long white hairs without exposed black spots. This white band extends over the entire segment and is very conspicuous and contrasting. Length, 16 mm. Width of head at vertex, 7 mm.

Type: One male, Lodgepole, Cheyenne county, Nebraska, July. Collection University of Nebraska.

A very distinct species belonging to the *fontinella* group.

***Cuterebra tenebrosa* Coquillet.**

The University collection contains a female from Hecla, Wyoming (S. G. Clason) and two males from Sheridan, Wyoming, taken August, 1900, which are referred to this species. They agree with Coquillet's description except in the face marks, for none of these specimens have any pollinose marks whatever on the face. This character, however, as the description intimates, is probably more or less variable in this species. Actual comparison with *tenebrosa* might show specific differences.

ILLUSTRATIONS OF THE ABDOMINAL APPENDAGES OF CERTAIN MOSQUITOES.

By HARRISON G. DYAR, A.M., Ph.D.,

WASHINGTON, D. C.

(PLATE VIII.)

***Grahamia mitchellæ* Dyar.** (Plate VIII, Fig. 1.)

Side piece elongate, outer lobe undeveloped, inner lobe small, setose; clasp moderately swollen centrally though not greatly inflated, with long terminal spine. Harpe jointed, basal part rather straight, uniform, apical filament long, as long as the basal part, uniform, scarcely tapered. Harpago smooth, curved, concave, the tip narrow and bent. Unci invisible. Appendage of the eighth segment small, setose.

Grabhamia punctor Kirby. (Plate VIII, Fig. 2.)

Side piece elongate, terminal hairs very stout; outer lobe distinct, running basally to join the inner lobe, moderately setose; inner lobe well developed, expanded, setose; clasp filamentous with long terminal spine. Harpe jointed, basal part curved, uniform, outer filament broad, curved, not long, slightly recurved at tip. Harpago curved, concave, the tip narrow and bent. Unci invisible. Appendage of eighth segment short, broad, setose.

Grabhamia abfitchii Felt. (Plate VIII, Fig. 3.)

Side piece elongate, with stout hairs at apex; outer lobe present, short, prominent, setose; inner lobe well developed, long, running up to the outer lobe, setose throughout; clasp filamentous with long terminal spine. Harpe jointed, uniform, the basal part curved, filament straight, equal in length to the basal part. Harpago smooth, elongate, curved, concave, the tip narrowed and bent. Unci invisible. Appendage of the eighth segment narrow, long, with few setæ.

Grabhamia fitchii Felt & Young. (Plate VIII, Fig. 4.)

Side piece elongate, with stout hairs at apex; outer lobe present, short, prominent, setose; inner lobe prominent, short, sharply conic, very densely haired; clasp filamentous with long terminal spine. Harpe jointed, basal part straight, uniform, apical filament short, broad, with a notch at base with a slight prominence above it, the tip curved over. Harpago curved, concave, prominent, the tip narrow and curved. Unci invisible. Appendage of eighth segment distinct, broad, with many setæ.

Culicelsa confirmatus Arrib. (Plate VIII, Fig. 5.)

Side piece elongate, narrowed outwardly; outer lobe present, elongate, smooth, an area at its base bearing numerous dense long hairs; inner lobe small, setose, a broad stout spine arising near it which is bent at base and recurved at tip; clasp filamentous with long terminal spine. Harpe jointed, the basal part long, even, the apical filament long, expanded, with a sharp retrorse branch near tip. Harpago elongate, conical, the tip tapered and bent. Unci invisible. Appendage of the eighth segment broad, setose.

Anopheles crucians Wied. (Plate VIII, Fig. 6.)

Side piece conic, stout, a lobe within near base bearing two stout setæ; a second lobe within the first, conic, with triple stout apical setæ and two smaller ones on the basal slope. Clasp stout, long and broad, narrowed centrally, with a small terminal spine.

Filament of harpe slender, uniform **abfitchii**.
 Filament of harpe broad, with a notch at base..... **fitchii**.

SYNOPSIS OF SPECIES OF *CULISELSA*.

Three species are now known to be referable to this genus. They separate as follows on genitalic characters.

Inner lobe of side piece broad and angled, but without a spine **tæniorhynchus**.
 Inner lobe of side piece small, rounded, with a stout spine with hooked tip.

Side piece broad without **inconspicuus**.
 Side piece narrowed without..... **confirmatus**.

The student will find a synopsis of genera of Culicidæ, based on genitalic characters in the Proceedings of the Entomological Society of Washington, vol. vii, pp. 42-49, 1905.

Class I, **HEXAPODA.**

Order V, **LEPIDOPTERA.**

NEW SPECIES OF NOCTUIDÆ FOR 1905, NO. 3.

BY JOHN B. SMITH, Sc.D.,

NEW BRUNSWICK, N. J.

***Bryophila viridimedia*, new species.**

Head black, vertex snow white. Thorax deep wine brown, the tip of the collar a narrow dorsal line and the posterior tuft white. Primaries with basal space deep wine brown; this shade being limited by the t. a. line which crosses the cell squarely, one third from base, runs back along the median vein and crosses the submedian interspace one fourth from base, and again extends outwardly along vein 1, crossing to the outer margin one third from base, through the green of the median space which extends below vein 1 nearly to the base of the wing; forming a square black spot on the inner margin. The median space is bright, mossy green, crossed centrally by a deeper green median shade. The orbicular spot is round, broadly white-ringed and edged by a few black scales. The reniform is centrally constricted, hour-glass shape, broadly white-ringed, edged with blackish scales. Beyond the reniform a subquadrate black spot fills the space between it and the t. p. line. The t. p. line is composed of black lunules, followed by a narrow white line, its course as a whole an even outcurve. There is no obvious s. t. line, yet there is a shading that indicates a division of terminal and subterminal spaces. On the costa is an oblong deep brown patch extending from t. p. line to the point of the s. t. line, leaving the apex pale with a greenish overlay; below that is a violaceous shading which, on the inner margin forms a violet brown blotch just before the anal angle. Along the outer margin is a bronze